



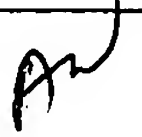
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,851	08/04/2003	David J. Corisis	2884.6US (96-0291.06/US)	5688
24247	7590	09/09/2004	EXAMINER	
TRASK BRITT P.O. BOX 2550 SALT LAKE CITY, UT 84110			MAGEE, THOMAS J	
			ART UNIT	PAPER NUMBER
			2811	

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/633,851	Applicant(s) CORISIS ET AL.	
	Examiner Thomas J. Magee	Art Unit 2811	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-10,12 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-10,12 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1 and 2 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1, 2, and 4 of prior U.S. Patent No. 6,087,720 in view of Orcott, U.S. Patent No. 4,504,435. Although the conflicting claims are not identical, the claimed subject matter of the instant application and the prior patent are not patentably distinct from each other because of the following reasons:

The claimed subject matter of the instant application wherein “ *a lead frame of a plurality of lead frames, the lead frame for a semiconductor device having a first surface and having at least one bond pad located thereon and having a bottom surface, the lead frame comprising:*
a lead frame of a plurality of lead frames, each lead frame located adjacent another lead frame having an opening located therebetween,

a plurality of lead fingers of the lead frame, each lead finger of the plurality having an end, at least a portion of the plurality of lead fingers having an opening for locating a semiconductor device therein having said plurality of lead fingers located adjacent the sides of the semiconductor device,

at least one bus bar having a portion extending along the end of the at least one lead finger of the plurality of lead fingers and along a portion of one side of a semiconductor device when located in said opening, and

a section of tape substantially rectangular in shape having an outer peripheral portion and a central portion for attaching at least a portion of the first surface of the semiconductor device thereto, the outer peripheral portion of the section of tape for attaching at least a portion of the at least two ends of the lead fingers of the plurality of lead fingers thereto, the section of tape being attached to a portion of the at least one bus bar,”

“wherein, the lead frame includes at least two bus bars, each bus bar of the at least two bus bars having a longitudinal contact portion extending along the end of the at least one lead fingers,”

as recited in Claims 1 and 2, is already claimed in Claims 1, 2, and 4 of U.S. Patent No. 6,087,720.

Claims 1, 2, and 4 of Patent No. 6,087,720 disclose the claimed structure except for the limitation of *“a plurality of lead frames,” “each lead frame located adjacent another*

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lead frame having an opening located therebetween."

However, Orcutt (US 4,504,435) discloses (Figures 1 and 6) that a plurality of lead frames are formed in a strip with a space therebetween. Hence it would have been obvious to one of ordinary skill in the art at the time of the invention to use the lead frame strip of Orcutt in US Patent No. 6,087,720 to obtain a plurality of lead frames for efficient packaging.

3. Claim 4 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 6 and 7 of prior U.S. Patent No. 6,087,720 in view of Orcott, U.S. Patent No. 4,504,435. Although the conflicting claims are not identical, the claimed subject matter of the instant application and the prior patent are not patentably distinct from each other because of the following reasons:

The claimed subject matter of the instant application wherein "*a lead frame of a plurality of lead frames for connecting a semiconductor device thereto, having a periphery, the lead frame comprising:*

a lead frame of a plurality of lead frames , each lead frame located adjacent another lead frame having an opening therebetween,

a plurality of lead fingers of the the lead frame, each lead finger of the plurality of lead fingers having an end, at least a portion of the plurality of lead fingers defining a semiconductor device opening in the lead frame,

a die paddle for supporting the semiconductor device thereon, and

at least two bus bars, each having at least a portion thereof extending along at least portions of bars having a portion thereof extending along the end of each lead finger of the plurality of lead fingers,”

as recited in Claim 4 is recited in Claims 6 and 7 of U.S. Patent No. 6,087,720, except for the limitation of a *“plurality of lead frames, each lead frame located adjacent another lead frame having an opening therebetween.”*

As discussed above, Orcott discloses a plurality of lead frames with an opening between adjacent lead frames. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the lead frame strip of Orcutt in US Patent No. 6,087,720 to obtain a plurality of lead frames for efficient packaging.

4. Claims 5 – 10, and 12 – 15 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 8 – 15, and 18 – 20 of prior U.S. Patent No. 6,087,720 in view of Orcott, U.S. Patent No. 4,504,435. Although the conflicting claims are not identical, the claimed subject matter of the instant application and the prior patent are not patentably distinct from each other because of the following reasons:

In independent Claim 5, the claimed subject matter of the instant application wherein, “a lead frame of a plurality of lead frames for use with a semiconductor device having a periphery, the lead frame comprising:

a lead frame located adjacent another lead frame of a plurality of lead frames having an opening therebetween, the lead frame having a plurality of inwardly extending leads extending to an opening for a semiconductor device to be located therein, at least one lead of the

plurality of inwardly extending leads having a portion extending along at least a portion of a length of at least two adjacent portions of the periphery of a semiconductor device and extending between the semiconductor device and another lead of the plurality of inwardly extending leads and a second inwardly extending lead extending along another portion of the length of the at least two adjacent portions of the periphery of a semiconductor device, the at least one lead of the plurality of inwardly extending leads for electrically connecting a semiconductor device to a power source,”

as recited in Claim 5 is recited in Claims 8, 9, and 15 of prior U.S. Patent No. 6,087,720, except for the limitation, “*a lead frame of a plurality of lead frames for use with a semiconductor device,*” wherein “*a lead frame is located adjacent another lead frame of a plurality of lead frames having an opening therebetween.*”

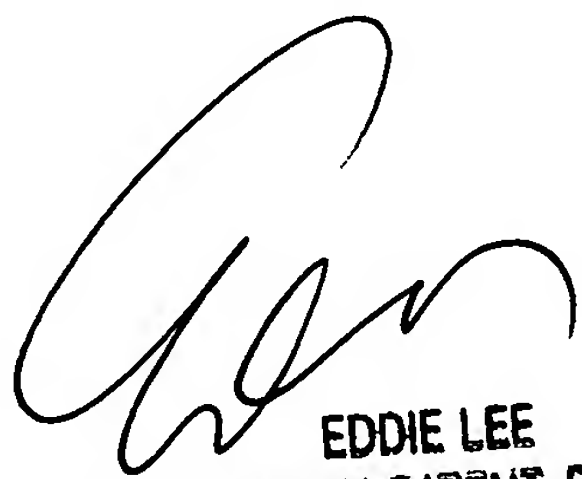
As discussed above, Orcott discloses a plurality of lead frames with an opening between adjacent lead frames. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the lead frame strip of Orcutt in US Patent No. 6,087,720 to obtain a plurality of lead frames for efficient packaging.

Additionally, the claimed limitations of dependent Claims 6 – 10, and 12 – 15 are within the scope of the claimed limitations of Claims 8 – 15, and 18 – 20 of prior U.S. Patent No. 6,087,720.

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Conclusions

5. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to **Thomas Magee**, whose telephone number is **(571) 272 1658**. The Examiner can normally be reached on Monday through Friday from 8:30AM to 5:00PM (EST). If attempts to reach the Examiner by telephone are unsuccessful, the examiner's supervisor, **Eddie Lee**, can be reached on **(571) 272-1732**. The fax number for the organization where this application or proceeding is assigned is **(703) 872-9306**.



EDDIE LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Thomas Magee
September 6, 2004